**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1-55. (Cancelled)

56. (Previously presented) A plant product produced from a barley plant, or a part thereof, wherein the barley plant has a mutation in the LOX-1 gene so that it encodes a mutated LOX-1 protein lacking all or at least a portion of amino acids 520 to 862 of wild type barley LOX-1 (SEQ ID NO: 3 or 7) with a total loss of LOX-1 activity.

57-58. (Canceled)

59. (Previously presented) The plant product of claim 56, wherein said plant product is a wort composition prepared from:

a) the barley plant or part thereof; or

b) a malt composition prepared from said barley plant or part thereof; or

c) a mixture of a) and b).

60. (Previously presented) The plant product according to claim 59, wherein the plant product is a wort composition, and wherein said part of said plant is kernel(s).

61. (Previously presented) The plant product according to claim 59, wherein the plant product is a wort composition and wherein said malt composition is a malt composition comprising a processed barley plant or part thereof.

62. (Previously presented) The plant product according to claim 59, wherein the plant product is a wort composition, and wherein said composition is prepared further using an enzyme composition or an enzyme mixture composition.

63. (Canceled)

64. (Previously presented) The plant product of claim 56, wherein the plant product is a wort composition or a beverage prepared from a composition comprising said barley plant, or a part thereof, and a malt composition prepared from said barley plant.

65. (Previously presented) The plant product of claim 56, wherein the plant product is a beverage having stable organoleptic qualities, wherein said beverage is obtained by manufacturing a barley plant or part thereof.

66. (Previously presented) The plant product of claim 65, wherein said beverage is beer.

67. (Previously presented) The plant product of claim 65, wherein said beverage is prepared using malt prepared from kernels of said barley plant.

68. (Previously presented) The plant product of claim 65 wherein said beverage is prepared from a wort composition prepared from a barley plant or part thereof, or from a malt composition prepared from said barley plant or part thereof.

69. (Previously presented) The plant product of claim 65, wherein said beverage is prepared from unmalted barley plants or parts thereof.

70. (Previously presented) The plant product of claim 65, wherein said beverage is a non-fermented beverage.

71. (Previously presented) The plant product of claim 65, wherein said barley plant, or parts thereof, comprise a LOX-1 gene, said gene comprising:

(i) a nonsense codon; or

(ii) a splice site mutation.

72. (Previously presented) The plant product of claim 71, wherein the gene encoding LOX-1 comprises:

(i) a nonsense codon, said codon corresponding to base nos. 3572–3574 of SEQ ID NO: 2; or

(ii) a splice site mutation, said mutation corresponding to base no. 2311 of SEQ ID NO: 6.

73. (Currently amended) A beverage having stable organoleptic qualities, wherein said beverage is manufactured by using a barley plant, wherein:

the barley plant has a mutation in the LOX-1 gene so that it encodes a mutated LOX-1 protein lacking all or at least a portion of amino acids 520 to 862 of wild type barley LOX-1 (SEQ ID NO: 3 or 7) with a total loss of LOX-1 activity;

the ratio of 9,12,13–trihydroxyoctadecenoic acid to 9,10,13–trihydroxyoctadecenoic acid within said beverage is at the most 1.8.

74. (Previously presented) The beverage according to claim 73, wherein said beverage is beer.

75. (Previously presented) The beverage of claim 73, wherein said beverage comprises at the most 0.05 ppb free *trans*-2-nonenal (T2N) after incubation at 37°C for 4 weeks, in the presence of in the range of 4 to 6 ppm sulfite.

76. (Previously presented) The plant product according to claim 56, wherein said plant product is a beverage.

77. (Previously presented) A method of producing:

(i) a food composition; or

(ii) a feed composition; or

(iii) a fragrance raw material composition; or

(iv) a malt composition; or

(v) a wort composition; or

(vi) a beverage; or

(vii) any combination of (i) to (vi);

using a barley plant or part thereof, wherein the barley plant has a mutation in the LOX-1 gene so that it encodes a mutated LOX-1 protein lacking all or at least a portion of amino acids 520 to 862 of wild type barley LOX-1 (SEQ ID NO: 3 or 7) with a total loss of LOX-1 activity.

78. (Previously presented) The plant product of claim 56, wherein said plant product is a food composition, a feed composition, or a fragrance raw material composition comprising the barley plant or part thereof.

79. (Canceled)

80. (Previously presented) The method of claim 77 wherein said method is a method for producing a beverage having stable organoleptic qualities, said method comprising the steps of:

(i) preparing a composition comprising a barley plant or parts thereof;

(ii) processing the composition of *(i)* into a beverage;

thereby obtaining a beverage with stable organoleptic qualities.

81. (Previously presented) The method according to claim 80, wherein step (*i*) comprises preparing a malt composition from kernels of said barley plant or part thereof.

82. (Previously presented) The method according to claim 80, wherein the method further comprises incubation with a LOX inhibitor.

83. (Previously presented) The method according to claim 80, wherein processing the composition into a beverages comprises a mashing step.

84. (Previously presented) The method according to claim 80, wherein a LOX inhibitor is added during said mashing step.

85. (Canceled)

86. (Previously presented) The plant product of claim 56, wherein the barley plant does not carry a mutation of the guanosine residue in the splice donor site of intron 5.

87. (Previously presented) The method of claim 77, wherein the barley plant does not carry a mutation of the guanosine residue in the splice donor site of intron 5.